<u>Appendix A - Data Dictionary</u>

Aquaculture, Commercial Harvest Areas

      Associated Files: class02.shp, class02.shx, class02.sbx, class02.sbn, class02.dbf

      Layer Description: Source: Washington State Department of Health (WDOH). Approved, Restricted, Conditional and Prohibited commercial harvesting areas for the year 2002.

      Fields:

            [AREA]: Area of harvest area

                  Values:

                        (Calculated value) as calculated by ArcMap

            [PERIMETER]: Perimeter of harvest area

                  Values:

                        (Calculated value) as calculated by ArcMap

            [CLASS]: Class of culture/harvest area

                  Values:

                        Approved: Approved for commercial harvest

                        Conditional: Conditionally approved for commercial harvest

                        Restricted: Commercial harvest restricted

                        Prohibited: Commercial harvest prohibited

Boat Ramps

      Associated Files: ramp.shp, ramp.shx, ramp.sbx, ramp.sbn, ramp.dbf

      Layer Description: Delineation of boat ramps along the shoreline. Polygon created by visually delineating the extent of structures visible on orthophotos. Intended use is for planning purposes.

      Fields:

            [LENGTH]: Length of ramp in feet

                  Values:

                        (Measured value): Manually measured using measurement tool in ArcMap

            [WIDTH]: Width of ramp in feet

                  Values:

                        (Measured value): Manually measured using measurement tool in ArcMap

            [AREA]: Area of ramp

                  Values:

                        (Calculated value): [LENGTH] X [WIDTH] in square feet as calculated manually

Energy

Associated Files: energy.shp, energy.shx, energy.sbx, energy.sbn, energy.dbf

Layer Description: Characterization of exposure and effective fetch in the survey area as characterized by ShoreZone. Intended use is for planning purposes. This layer contains the entire length of any ShoreZone Units intersecting the study area; unit lengths were not clipped at the boundary ends of the study area.

Fields:

[LENGTH]: Length of shoreline section in feet

Values:

(Calculated value): length of section in feet as calculated by ArcMap

[UNIT ID]: ShoreZone Unit identification

[EXP_CLASS]: Numeric code for best exposure estimate as characterized by ShoreZone

Values:

SP: Semi-protected

P: Protected

VP: Very protected

[EFF_FET]: Modified effective fetch in kilometers

Values:

(Numerical value) as given in ShoreZone

Freshwater Inputs

Associated Files: Freshwater_input_arc.shp, Freshwater_input_arc.shx, Freshwater_input_arc.sbx, Freshwater_input_arc.sbn, Freshwater_input_arc.dbf, Freshwater_input_pts.shp, Freshwater_input_pts.shx, Freshwater_input_pts.sbx, Freshwater_input_pts.sbn, Freshwater_input_pts.dbf

Layer Description: Locations of streams and outfalls at the shoreline. Intended use is for planning purposes.

Fields:

[SOURCE]: Name of folder in electronic version of ShoreZone's data dictionary - Appendix B in accompanying document   Values:

(Name of source – Federal Way, Washington Trout, City of Seattle, King County, Washington Department of Ecology)

[FILENAME]: File name of source shapefile (in electronic version of ShoreZone's data dictionary - Appendix B in accompanying document)

Values:

(Name of shapefile)

Impervious Surfaces

Associated Files: impervious.shp, impervious.shx, impervious.sbx, impervious.sbn, impervious.dbf

Layer Description: Characterization of impervious surface coverage in the zone within 200 feet of the shoreline. Created by coding the ShoreZone line into categories using photo interpretation of orthophotos. Intended use is for planning purposes.

Fields:

[PCTIMP]: Estimated percent of impervious surface coverage

Values:

LOW: Less than 10% coverage

MED: Between 10 and 75% coverage

HIGH: 75 % or greater coverage

[LENGTH]: Length of shoreline section in feet

Values:

(Calculated value): length of section in feet as calculated by ArcMap

Interpretation Notes/Comments

Associated Files: interpretation_notes.shp, interpretation_notes.shx, interpretation_notes.sbx, interpretation_notes.sbn, interpretation_notes.dbf

Layer Description: Description and location information for areas which posed some difficulty in photo interpretation and the reasons for the difficulties. Created by commenting on the attribute and individual reasons for the difficulty. Intended use is for planning purposes.

Fields:

[UNIT ID]: ShoreZone Unit identification

[ATTRIBUTE]: Habitat attribute of interest

Values:

(Habitat attributes): One of several habitat attributes that may have posed some difficulty in interpretation

[REASONS]: Reason for difficulty in interpretation

Values:

(Explanation): Comment explanation of reason why the habitat attribute may have posed some difficulty in interpretation

Jetties, Breakwaters, and Groins

Associated Files: jetty-groin-breakwater.shp, jetty-groin-breakwater.shx, jetty-groin-breakwater.sbx, jetty-groin-breakwater.sbn, jetty-groin-breakwater.dbf

Layer Description: Delineation of jetties, breakwaters, and groins along the shoreline. Created by visually delineating the extent of structures visible on orthophotos. Intended use is for planning purposes.

Fields:

[JETTY]: Type of structure

Values:

JET: Jetty – armoring structure that extends out into the water and is intended to protect a navigation channel or marina. Jetties are typically comprised of large riprap.

BRE: Breakwater – offshore structure that is usually aligned parallel to shore and provides protection from waves.

GRO: Groin – barrier-type structure that extends from shore and is similar to, but much smaller than a jetty. Groins are generally aligned perpendicular to shore for the purpose of protecting shoreline and adjacent upland by influencing movement of water and/or transport of materials.

[LENGTH]: Length of structure in feet

Values:

(Measured value): Manually measured using measurement tool in ArcMap

Large Woody Debris

Associated Files: LWD.shp, LWD.shx, LWD.sbx, LWD.sbn, LWD.dbf

Layer Description: Characterization of large woody debris at the shoreline. Created by coding the ShoreZone line into categories using photo interpretation of orthophotos and aerial obliques with limited field verification. Certain sections of shoreline were not clearly visible due to extensive shadowy conditions in the photos (see Section 2 of accompanying report). Intended use is for planning purposes.

Fields:

[LWD]: Status of large woody debris along the shoreline

Values:

NONE: No debris present

DRIF: Areas greater than 100 lineal feet of shoreline with a continuous distribution of drift logs that includes a section with multiple logs stacked together in the intertidal zone or backshore

LWD: Areas with more than 100 lineal feet of shoreline with downed trees across the intertidal zone

[LENGTH]: Length of shoreline in feet with large woody debris present

Values:

(Calculated value): length of section in feet as calculated by ArcMap

Marine Rails

Associated Files: marine_rail.shp, marine_rail.shx, marine_rail.sbx, marine_rail.sbn, marine_rail.dbf

Layer Description: Location of primarily residential marine rails along the shoreline. Line created by visually delineating the length of marine rails visible on orthophotos. Intended use is for planning purposes.

Fields:

[LENGTH]: Length of marine rails in feet

Values:

(Calculated value): length of section in feet as calculated by ArcMap

Marine Riparian Vegetation

    Associated Files: MRV.shp, MRV.shx, MRV.sbx, MRV.sbn, MRV.dbf

    Layer Description: Characterization of marine riparian vegetation conditions within 200 feet of the water line. Created by coding the ShoreZone line into categories using photo interpretation of orthophotos and aerial obliques with limited field verification. Certain sections of shoreline were not clearly visible due to extensive shadowy conditions in the photos (See Section 2 of accompanying report). Intended use is for planning purposes.

    Fields:

        [TYPE]: Type of riparian vegetation

            Values:

                TR: Mature trees

                GR: Grass/landscaped

                SH: Immature trees and shrubs

                NO: None

        [DIST]: Distance of riparian vegetation to water line

            Values:

                SEP: Separated – separated rom water line by > 10 meters

                ADJ: Adjacent - separated from water line by < 10 meters

                N/A: Not applicable. No vegetation present.

        [OVRH]: Overhanging vegetation

            Values:

                Y: Yes, vegetation overhangs the water by > 10 feet

                N: No, vegetation does not overhang the water by > 10 feet

        [DENS]: Density of vegetation

            Values

                P: Patchy vegetation within 200 feet of the water line (Patchy: the area within 200 feet of the shoreline is <75% covered by vegetation)

                C: Continuous vegetation within 200 feet of the water line (Continuous: the area within 200 feet of the shoreline is 75% or more covered by vegetation)

                NONE: No vegetation.

        [LENGTH]: Length of shoreline section in feet

            Values:

                (Calculated value): length of section in feet as calculated by ArcMap

        [MRV_TEXT]: Description of vegetation

            Values:

                [This is a comment field summarizing all of the above fields. (i.e. Trees, Separated, No, Patchy)]

Marsh Habitat

Associated Files: Marsh.shp, Marsh.shx, Marsh.sbx, Marsh.sbn, Marsh.dbf

Layer Description: ShoreZone's characterization of marsh vegetation at the shoreline. Intended use is for planning purposes. This layer contains the entire length of any ShoreZone Units intersecting the study area; unit lengths were not clipped at the boundary ends of the study area.

Fields:

[UNIT ID]: ShoreZone Unit identification

[LENGTH]: Length of shoreline section containing marsh vegetation

Values:

(Calculated value): length of section in feet as calculated by ArcMap

[TRI]: Distribution of native high marsh (*Triglochin, Salicornia, Distichylus,* and others in salt-tolerant assemblage) vegetation in a shoreline section

Values:

PATCHY: patchy distribution of vegetation

CONTINUOUS: continuous distribution of vegetation

ABSENT: vegetation absent

[GRA]: Distribution of grassy marsh vegetation (*Leymus mollis* and other salt-tolerant grasses) in a shoreline section

Values:

PATCHY: patchy distribution of vegetation

CONTINUOUS: continuous distribution of vegetation

ABSENT: vegetation absent

[SAL]: Distribution of marsh vegetation (lower *Salicornia* marsh lacking other grasses/herbs) in a shoreline section

Values:

PATCHY: patchy distribution of vegetation

CONTINUOUS: continuous distribution of vegetation

ABSENT: vegetation absent

[SED]: Distribution of sedge marsh (brackish/freshwater wetland assemblages found at stream mouths) in a shoreline section

Values:

PATCHY: patchy distribution of vegetation

CONTINUOUS: continuous distribution of vegetation

ABSENT: vegetation absent

Overwater Structures

Associated Files: overwater_structure.shp, overwater_structure.shx,
overwater_structure.sbx, overwater_structure.sbn, overwater_structure.dbf

Layer Description: Delineation of overwater structures along the shoreline, including docks, piers, and marinas. Created by visually delineating the extent of structures visible on orthophotos. Intended use is for planning purposes.

Fields:

[TYPE]: Type of overwater structure
Values:
OWS: Overwater structure besides marina
MAR: Marina

[ORIENT]: Compass orientation of structure
Values:
(Assigned numerical value): number between 0 and 359, with 0 indicating North

[AREA]: Area of structure
Values:
(Calculated value): Value in square feet calculated by ArcMap and manually for some structures

Sedimentation (Net Shore Drift)

Associated Files: driftcell_arc_seattle.shp, driftcell_arc_seattle.shx,
driftcell_arc_seattle.sbx, driftcell_arc_seattle.sbn, driftcell_arc_seattle.dbf
driftcell_arc_wria9.shp, driftcell_arc_wria9.shx, driftcell_arc_wria9.sbx,
driftcell_arc_wria9.sbn, driftcell_arc_wria9.dbf, 61 text files.

Layer Description: Source is Washington State Department of Ecology (WDOE). Characterization of net shore drift at the shoreline. Intended use is for planning purposes.

Fields:

[DC_DS_PATH]: Path for descriptive text files covering each drift cell.
Values:
(Path name)

[DCELL_NR]: Drift cell number
Values:
(Assigned value)

[CELL_TYP]: Drift cell type code
Values:
L to R: left to right
R to L: right to left
DZ: divergence zone
NAD: No appreciable drift
UN: Undefined drift

Shoreline Armoring

Associated Files: armoring.shp, armoring.shx, armoring.sbx, armoring.sbn, armoring.dbf

Layer Description: Characterization of shoreline armoring along the shoreline. Created by coding the ShoreZone line into categories using photo interpretation of orthophotos and aerial obliques with limited field verification. Certain sections of shoreline were not clearly visible due to extensive shadowy conditions in the photos (see Section 2 of accompanying report). Resolution is 50 linear feet in City of Seattle and at 100 linear foot resolution in remainder of project area. Intended use is for planning purposes.

Fields:

[ARMOR]: Status of shoreline armoring.

Values:

Y: Yes, this section is armored.

N: No, this section is not armored.

[LENGTH]: Length of section in feet

Values:

(Calculated value): length of section in feet as calculated by ArcMap

Substrate

Associated Files: xshr_substrate_subtidal.shp, xshr_substrate_subtidal.shx, xshr_substrate_subtidal.sbx, xshr_substrate_subtidal.sbn, xshr_substrate_subtidal.dbf, xshr_substrate_intertidal.shp, xshr_substrate_intertidal.shx, xshr_substrate_intertidal.sbx, xshr_substrate_intertidal.sbn, xshr_substrate_intertidal.dbf, xshr_substrate_supratidal.shp, xshr_substrate_supratidal.shx, xshr_substrate_supratidal.sbx, xshr_substrate_supratidal.sbn, xshr_substrate_supratidal.dbf

Layer Description: These layers are summaries of ShoreZone's cross-shore layers. There are three separate layers characterizing dominant cross-shore material information for the supratidal, intertidal, and subtidal zones of the survey area. For subtidal zones, this information is provided for only a limited portion of shoreline (<10%); it is unknown how representative this partial characterization is of subtidal materials in the entire survey area. In each zone, ShoreZone identifies discrete bands called components that have different materials than adjacent areas situated higher or lower in the zone. The supratidal and intertidal zones have one or more components identified in each ShoreZone unit and the subtidal zone provides component information for a small subset of the project area. Intended use is for planning purposes.

Fields:

[UNIT ID]: ShoreZone Unit identification

[LENGTH]: Length of section in feet

Values:

(Calculated value): length of section in feet as calculated by ArcMap

[ZONE_WIDTH]: Width of entire zone in feet (all components combined)

Values:

(Assigned numerical value) in feet as assigned in ShoreZone

[WIDEST_ZC]: Widest zone component. The width of zone components given in ShoreZone were compared; the widest zone is identified here.

Values:

(Assigned alphanumeric code (i.e. A1, A2, A3)) as assigned in ShoreZone (for definitions, see electronic version of ShoreZone's data dictionary - Appendix B in accompanying document)

[WIDEST_MAT]: Descriptor code for material in widest zone component.

Values:

(Assigned alphabetic code) (i.e. Csp, Ar) as assigned in ShoreZone (for definitions, see electronic version of ShoreZone's data dictionary – Appendix B in accompanying document)

[WIDEST_WID]: Width of widest zone component in feet

Values:

(Numerical value) in feet as assigned in ShoreZone

[WIDEST_DOM]: Descriptor code for dominant material in widest zone component.

Values:

(Assigned alphabetic code) (i.e. Csp, Ar) as assigned in ShoreZone (for definitions, see electronic version of ShoreZone's data dictionary – Appendix B in accompanying document)

[DOMMAT_DES]: Word description of dominant material in widest zone component

Values:

Comment field describing dominant material in widest zone component